PolyGard® Uninterrupted Power Supply UPS

Serial Number -

User Manual

August, 2012

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Phone.: 0049(0)8531/9004-0 Fax: 0049(0)8531/9004-54
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Specification subject to change without notice
Made in Germany

1 Uninterrupted Power Supply UPS

1.1 Intended Use

The intended sites within the ambient conditions as specified in the Technical Data are all areas being directly connected to the public low voltage supply, e.g. residential, commercial and industrial ranges as well as small enterprises (according to EN50 082).

The PolyGard® UPS must not be used in potentially explosive atmospheres.

The UPS may only be used in connection with the PolyGard gas controller systems MGC-04 and DGC-05.

1.2 Description

Battery powered, uninterrupted supply of the DGC-05/ MGC-04 gas controller systems with its associated transmitters when power is lost.

A mains monitoring relay, 1K1, is integrated in the Gas Controller. In case of power failure the digital input 1 of the gas controller is activated. Alarms are inherently set depending on the configuration.

The charging of the maintenance-free lead batteries is effected via the power supply of the DGC-05/ MGC-04 controller. The built-in deep discharge protection switches off at 80% (19.2 V) of the nominal voltage.

According to the current regulations for gas detection systems, the uninterrupted supply of gas controller and gas transmitters is compulsory for at least an hour when power is lost. Two UPS with 2.0 Ah and 7.2 Ah are available as standards.

Depending on the actual load there is a residual current (mA) for the supply of warning devices.

The following table shows the "residual current" in dependence of the load and battery capacity:

Number of max. PolyGard Transmitters	UPS 2.0 Ah	USV 7.2 Ah
	Max. current for supply of external devices (mA)	
16	600	3000
32	2.0 Ah UPS not allowed	2400
48		1700
64		1000
80		300
98		0

Supplying other equipment of other devices via the UPS of the gas controller in not allowed.

1.3 Mounting/ Installation

The housing is fixed to the wall at the 4 marked mounting points. Ceiling installation is not possible. Afterwards please put the separately delivered batteries into the housing. The 2.0 Ah batteries are placed one behind the other, the two 7.2 Ah batteries side by side. See fig. 01.

The UPS is connected to the DGC/MGC via a NYM 3x 1.5 mm^2 cable according the connection diagram.

The wiring of the two batteries is done according to the connection diagram fig. 02 with the included/ prepared wires. Please pay special attention to the polarity and series connection of the batteries.

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1.4 Commissioning

The delivered UPS is ready for use. After connection of the two batteries and switch-on of the fuse 1F2, the UPS is in operation.

1.5 Technical Data

Battery backed supply for controller and transmitters	Supply duration 60 minutes, maintenance-free rechargeable battery with charge function and deep discharge protection
Expected life-time rechargeable battery	> 5 years
Housing	Plastic housing with view cover
Colour	RAL 7032
Protection class	IP 65
Weight	Min. ca. 3.8 kg Max. ca. 7.2 kg (depending on type)
Installation	Wall mounting
Cable entry	M16; M20
Dimensions (W x H x D)	298 x 260 x 140 mm (2.0 Ah) 410 x 285 x 140 mm (7.2 Ah)

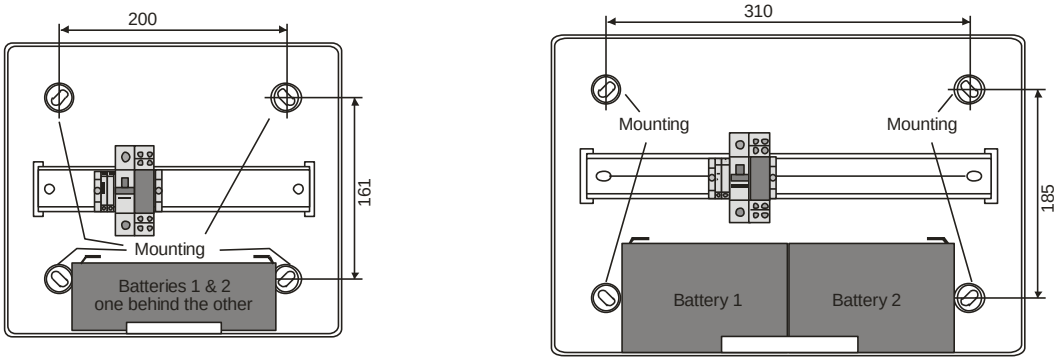

Fig. 1 Housing 2.0Ah type 7.2 Ah type

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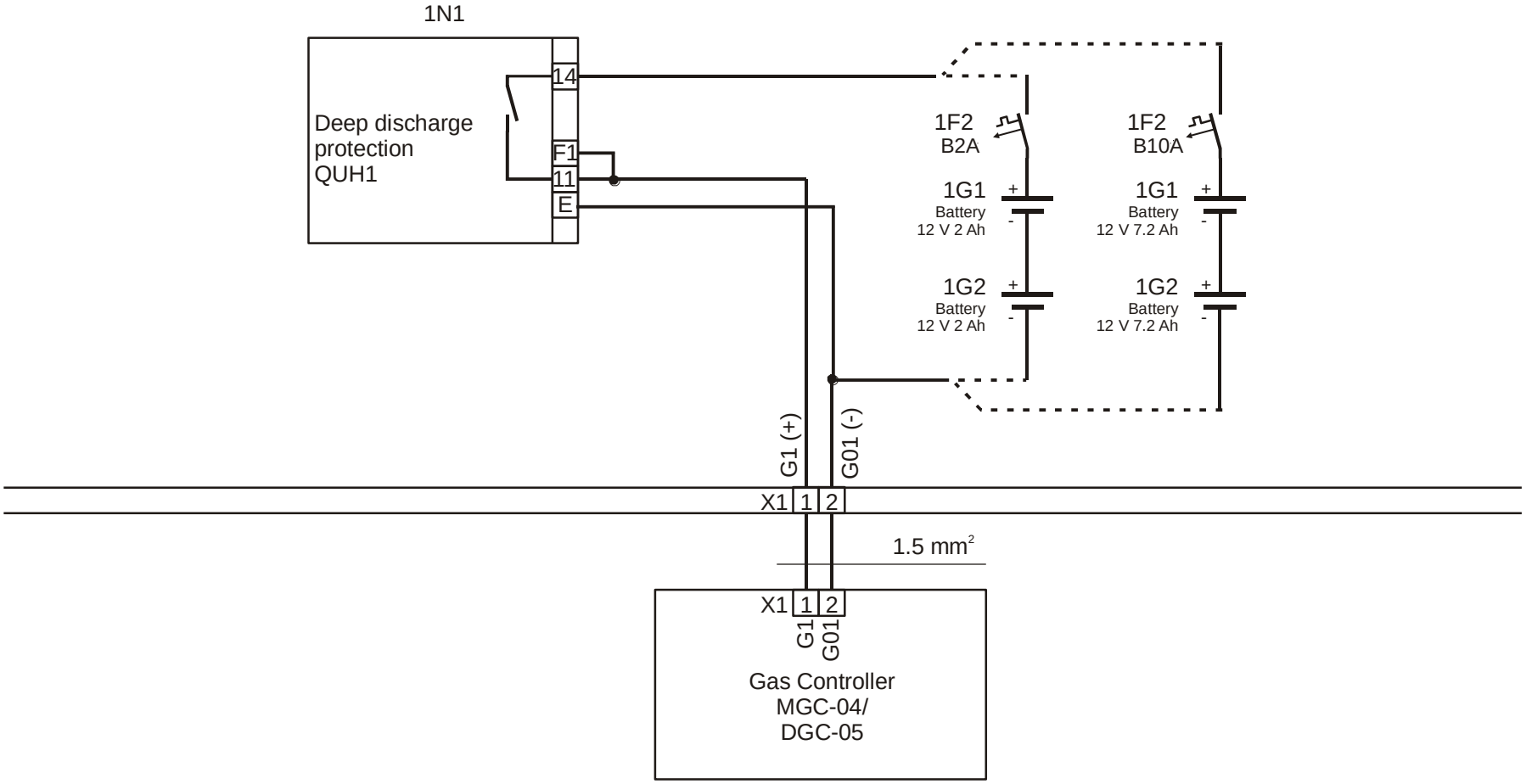

Fig. 2: Connection diagram

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